



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,941	08/05/2003	Richard Hull	B-5194 621143-9	8867

7590 10/31/2007
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 27240
Fort Collins, CO 80527-2400

EXAMINER

LIN, WEN TAI

ART UNIT	PAPER NUMBER
----------	--------------

2154

MAIL DATE	DELIVERY MODE
-----------	---------------

10/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/635,941

Applicant(s)

HULL ET AL.

Examiner

Wen-Tai Lin

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/03, 2/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-31 are presented for examination.
2. Claims 1-28 and 31 are objected to because of the following issues/informalities:
 - (i) In claims 3-4, 7-11, 19, 26 and 31: the word "said" in the phrase "the said ..." appears to be redundant.
 - (ii) In claims 1, 22 and 27-28: the word "said" in the phrase "a said ..." appears to be redundant.
 - (iii) In claims 7-10 and 25-27: the term "the then current position" appears to lack antecedent basis.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-8, 16-22, 24-26 and 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Reisman[U.S. PGPub 20040031058].

5. As to claim 1, Reisman teaches the invention as claimed including: a method of establishing coordinated consumption of a streamed media object by first and second devices [e.g., Abstract; Fig.1], comprising the steps of:

(a) in the course of streaming the media object in a first stream from a server to the first device and presenting the object thereat, using a device to effect initiation of said coordinated consumption [e.g., Figs. 5-6; paragraphs 48, 52, 77 133 and 150];

(b) consequent on said initiation, establishing streaming of the media object from the server to the second device in a second stream separate from said first stream and starting from a position in the media object that is dependent on progress of the streaming/presentation of the object to/at the first device [paragraphs 10, 29, 36, 377]; and (c) presenting the media object at the second device [note that the "cloning" capability of Reisman's system makes it possible to initiate the second stream from the first stream].

6. As to claims 2 and 7-8, Reisman further teaches that in step (b) the position at which the second stream is started is dependent on the position reached in presenting the media object to the first device at the time of said initiation [e.g., paragraphs 37 and 62], wherein the streamed media object is presented at the first device as soon as it is

received in the first stream [note that this is inherent true of Reisman's streaming process].

7. As to claim 3, Reisman further teaches that presentation of the media object at the first device continues whilst the second stream is established; the position at which the second stream is started is the position reached in presenting the media object to the first device at the time of said initiation, adjusted by an amount that takes account of run on of the presentation of the media object at the first device during establishment of the second stream; and in step (c) presentation of the media object at the second device commences substantially upon receipt of the second stream by the second device [e.g., paragraph 491].

8. As to claim 4, Reisman further teaches that presentation of the media object at the first device is paused at least whilst the second stream is established; the position at which the second stream is started is substantially the position reached in presenting the media object to the first device at the time of said initiation; and in step (c) presentation of the media object at the first device is restarted substantially at the same time as presentation of the media object at the second device is started [e.g., paragraphs 213 and 393].

9. As to claim 5, Reisman further teaches that the second device sends the first device a commencement signal in coordination with starting presentation of the media

Art Unit: 2154

object at the second device, presentation of the media object at the first device being restarted in response to receipt of said commencement signal at the first device [e.g., 625, 665, Fig.6].

10. As to claim 6, Reisman further teaches that in step (c) the second device sends a ready-to-commence indication to the first device when it is ready to commence presentation of the media object; the first device, following receipt of said ready-to-commence indication, sending a commencement signal to the second device and restarting presentation of the media object at the first device in coordination with the sending of the commencement signal; and the second device starting presentation of the media object at the second device upon receipt of the commencement signal [e.g., paragraphs 364 and 377; i.e., an asynchronous mode of cloning process].

11. As to claim 16, Reisman further teaches that after establishment of the second stream, the generation and sending of the first and second streams is carried out independently [e.g., paragraph 377; i.e., opening a new destination resource].

12. As to claim 17, Reisman further teaches that at the server an internal stream is formed from the media object and processed for sending as said first stream, the internal stream being duplicated and processed for sending as said second stream [e.g., paragraph 377; i.e., a cloning that duplicates the current resource system].

13. As to claim 18, Reisman further teaches that subsequent to the commencement of presentation of the media object by both the first and second devices in at least approximate coordination, presentation coordination signals are periodically sent from at least one device to the other to enable the latter to adjust its presentation of the media object to bring it into closer coordination with the presentation by said one device [e.g., paragraph 491, wherein state tracking is implemented by using a hybrid of full state exports and event logs, wherein a full dump or image copy is made periodically ...].

14. As to claim 19, Reisman further teaches that subsequent to the commencement of presentation of the media object by both the first and second devices in at least approximate coordination, a change signal is sent from at least one device to the other upon the one device changing its presentation position in or progression through the media object otherwise than as part of its normal progression therethrough, the other device using this change signal to adjust its presentation of the media object correspondingly [e.g., paragraph 169; i.e., synchronization enhanced by tracking the change in time-position associated with a real-time video].

15. As to claim 20, Reisman further teaches that the first and second devices are mobile devices [e.g., 140, 150, 126, Fig.1; paragraph 98].

Art Unit: 2154

16. As to claims 21-22, 24-26 and 29-31, since the features of these claims can also be found in claims 1-8 and 16-20, they are rejected for the same reasons set forth in the rejection of claims 1-8 and 16-20 above.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 9-15, 23 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reisman [U.S. PGPub 20040031058], as applied to claims 1-8, 16-22, 24-26 and 29-31 above.

19. As to claims 9-10, Reisman further teaches that: in step (b) the position at which the second stream is started is the then current position reached in sending the media object from the server to the first device less an offset corresponding to any offset at the first device between receiving and presentation positions in the media object, and the second device delays the start of presentation of the media object in step (c) by an amount corresponding to any offset at the first device between receiving and presentation positions in the media object. [e.g., paragraph 491].

Reisman does not specifically teach the first device includes a cache used to hold any portion of the media object received in the first stream but yet to be presented.

However, it is well known in the art that to support real time presentation of continuous media with steady rate, buffering the streamed data is a typical approach to smooth up the otherwise fluctuating network traffic flows [e.g., paragraph 42].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use cache as temporary buffer for the first stream at the first device because cache is a popular buffer for keeping organized information.

20. As to claim 11, Reisman teaches adjusting for transmission latency as the second stream (i.e., a cloned stream of the first stream) is established to play synchronously with the first stream. Reisman does not specifically teach jumping back a certain amount corresponding to any offset at the first device between receiving and presentation positions in the media object.

However, Reisman teaches that various VCR-like function such as pause, skip, fast-forward, etc. could be used in the adjusting the streams for synchronization [e.g., paragraph 213]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the timing for synchronizing the first and second beams by either moving forward the second beam or jumping backward the first beam for an amount offsetting the latency between the two beams because both are obvious options and an ordinary artisan could have tried either way to bring the two beams in synchronization.

Further, Reisman does not specifically teach that the cache of the first device is flushed subsequent to said initiation of coordinated consumption but no later than commencement of presentation of the media object at the second device in step (c).

However, it is well known that buffers used in the beaming process are of limited size and hence it is an obvious practice to flush the cache (which is used as a temporary buffer) in synchronization with the input/output beaming events associated with the buffers because this is a typical way of preventing the buffers from being overflowed.

21. As to claims 12-15, 23 and 27-28, since the features of these claims can also be found in claims 1-2, 4-7, 11, 21-22 and 25, they are rejected for the same reasons set forth in the rejection of claims 1-2, 4-7, 11, 21-22 and 25 above.

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Andrew et al. [U.S. PGPub 20020073152]; and
Sallette [U.S. Pat. No. 6155840].

23. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 days from the mail date of this letter. Failure to respond within the period for response will result in ABANDONMENT of the application (see 35 U.S.C. 133, M.P.E.P. 710.02, 710.02(b)).

Conclusion

Examiner note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday(8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 for official communications; and

(571) 273-3969 for status inquiries draft communication.